A Miſcellaneous Catalogue *of Mean, vulgar, cheap and ſimple Experiments. Drawn up by Sr.* William Petty, Preſident *of the* Dublin Society, *and by Him preſented to that* Society

1. THE Weight of a Cubical foot of Sea-Water, freſh River-Water, Spring-Water and Rain-Water; as alſo of Ale, French Wine, Brandy, Metheglin and Spaniſh Wine, Oil-Olive, Rape-Oil and Train-Oil?

2. The Weight of a Cubical foot of Wheat, Barly, Peas, Oats? *&c.*

3. The Quantity and Weight of Juice that ten pound of Apples, Pears, Gooſberries, Mulberries, Peaches, and Grapes will yield in order to make Drink?

4. The Weight of a Cubical foot of Oak, Aſh, Elm, Fir, Willow, Alder, Birch, Yew, Pear-tree and Box-timber, and the difference between the weight of the ſaid timbers, extreamly green and extreamly dry?

5. The Weight of the Shell, White and Yelk of an Egg, *viz.* of Pidgeons, Hens, Ducks, Geeſe and Turkies, and the proportion between the weight of the Egg and the Hen? *&c.*

6. The Weight of a Cubical foot of Wool, Tow, Feathers, Hey, *&c.* pres'ſd down with ſeveral weights?

7. The Weight of ſeveral Bottles and Cask which are in common uſe?

8. The Weight of a Cubical foot of Lime, Sand and Mold?

9. The Weight of Apples, Pears, Nuts and other fruits; as alſo their correſpondent Numbers and Magnitudes?

10. Comparative Weight of a hundred Apples born upon the ſame Tree in ſeveral years?

11. Let there be a Bag of Wool, and Shot made

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thereinto by a Muſquet, Carbine and Piſtol, and let it be obſerved how far each Bullet pierceth the ſame?

12. What ſpace ſeveral ſorts of Animals will run in a minute *viz.* a Horſe, Greyhound, Hare, Fox, Rabbit, even to a Louſe, and other creeping Animals?

13. The difference of Flight of ſeveral ſorts of Birds within the ſame time?

14. What Proportion of each ſort of Letters are in the Engliſh, Latin and French Tongues, *&c.*

15. Foraſmuch as all Printers Letters are of the ſame height, *quære* the Weight of an Alphabet of the ſeveral uſual ſizes?

16. *Quære* how many of each ſort of Letters will ſtand in ten inches ſquare?

17. *Quære* how many Letters may be compoſed and diſtributed in an hour?

18. What difference in the Duration of a Light made with Tallow, Bees-wax and Oil, and in Tallow of ſeveral ages and ſorts?

19. The Duration of Candles of the ſame Weight, and Weik of ſeveral bigneſſes.

20. The difference of Duration of the ſame Weight of ſeveral ſorts of Pit-Coles, and the ſeveral weight of their Aſhes, and of the ſeveral quantities of Water that the ſame will make to boil in the ſame ſort of Furnace and Veſſels?

21. Of the Duration of ſeveral Matches and Coles, and of the time that ſeveral Woods will keep fire raked up in Aſhes?

22. Of the Strength of the ſame Fires on the ſeveral Blaſts, and their different duration?

23. The proportions of Nitre, Brimſtone, and Cole, in the ſeveral ſorts of Gunpowder?

24 The proportions of Oil, Tallow, Salt and Lie in the ſeveral ſorts of Soape?

25. What proportion of Pitch and Tallow for the uſe of a Ship?

26. What quantity of Tar goes for paying a yard ſquare upon a Ship?

27. What are the proportions of Brimſtone and Roſin for graving a Ship?

28. What the proportion of Lime and Sand for Brick mortar.

29. What the proportion of Lime and Hair for Plaiſtering?

30. What the proportion of Linſeed-Oil and Oker for Colouring and Priming?

31. What the proportion of Lead and Pewter for Soder?

32. What the weight of Wool and length of Thred in a yard ſquare of the ſeveral ſorts of Woollen Manufactures?

33. The ſame for the Manufacture of Hemp, Flax, Cotton, Hair and Silk?

34. The proportion of Meal, Water and Yeaſt in Bread, in Dow new baked and ſtale?

35. The proportion of Increaſe between Dow and the ſame fermented; between Barly and the ſame malted?

36. The Proportion of Hemp and Tar in a well-made Rope?

37. The quantity of Stuff in any Garment propounded, and the length of the ſeveral Seams and the Sewing Thread, and number of Stitches in the ſame?

38. The proportion between the Weight, and the Extent of the ſeveral Leathers in a ſhooe?

39. How many Shooes of a certain ſize, a Shooemaker can make up in a time given?

40. What length of Thred can be ſpun in ten hours, from Cable-yarn to Taylors brown Thred?

41. What is the length of an Ounce of all fine Thred?

42. To what extent may an Ounce of fine Gold, Sil-

ver, Tin and Copper be beaten, and to what lengths the ſame may be drawn into Wire?

43. What is the Weight of an Ox of 1, 2, 3, 4, 5 and 6 years old, in ten ſeveral degrees of Paſture in *Ireland*?

44. How do ſeveral ſorts of Trees increaſe in weight and height *per annum*?

45. To how many dos each ſort of Seed multiply?

46. What proportion doth the Kernel of an Apple bear to the Apple it ſelf; with the ſame for other Fruits and Plants?

47. What is the difference between the Weight of Hyſop and Wormwood, or of any other Herbs, upon the ſame ſquare of Ground for one years Growth?

48. What is the difference of the Worth of plowing the ſame quantity of Ground in ten ſeveral ſorts of Land in *Ireland*?

49. The quantities of Rain that fall in an hour upon the ſame ſcope of Land?

50. The ſeveral weights of a Fleece of Wool at ſheering, kept dry, and in a moiſt place?

51. What difference in the weight of Hides of Cattel of the ſame weight?

52. What difference in the way of Ships *per* hour in all varieties of caſes?

53. At a certain Point in the Sea, to obſerve the depth of the Water every hour of the year, with the ſwiftneſs and ſlowneſs of ebbing and flowing water between any two Points aſſigned?

54. What are the differences of Illuminations from one to a hundred equal Candles in a parallel-ſided Room?

55. The different effects of the Wind, upon the Sound of a Bell?

56. The different diſtances of time between the Sound

Sound and Fire of a Gun, and the meaſuring of the diſtance of Thunder thereby?

57. The difference of the weight of Animals by Tranſpiration, ordinary and extraordinary?

58. The different proportions of the times of ſleeping and waking in ſeveral Animals, particularly in Fiſhes?

59. The proportion between the length, weight and thickneſs of the beſt Bows and Arrows?

60. The different effects of Bows at ſeveral bents upon the ſame Arrow?

61. The different weights of Indico, Madder, Cocheoneel, Weld, Fuſtick and Logwood, that will dy the ſame quantity of the ſame Stuff to a degree aſſigned?

62. How much of each of the ſaid dying ſtuff will produce black?

63 What is the proportion of Copperas and Gauls for the dying of wool into a black colour?

With infinite more Experiments of this kind.
